

**ABSTRACT OF THE DISCLOSURE**

A manufacturing method achieves excellent magnetic recording characteristics by sequentially sputtering a non-magnetic under-layer, a non-magnetic intermediate layer, and a magnetic layer on a non-magnetic substrate in an atmosphere of H<sub>2</sub>O partial pressure of  $2 \times 10^{-10}$  Torr or lower. This process allows beneficial deposition of the magnetic layer and reduces raw materials costs. The magnetic layer includes ferromagnetic grains and non-magnetic grain boundaries. The intermediate layer has a hexagonal close-packed crystal structure. The manufacturing method allows manufacture of a high quality magnetic recording medium without a heating step thereby allowing use of lower cost materials, reduces manufacturing time, and increases savings.

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